

**SANGAMON COUNTY  
COUNTY BOARD OFFICE**



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**SPECIAL  
PUBLIC HEALTH, SAFETY & ZONING COMMITTEE  
MAY 23, 2012  
6:30 PM**

**AGENDA**

**Sign In – Guests please sign in and fill out question cards  
Meeting Called to Order at 6:30 pm**

**New Business**

**I. Introductions & Opening Remarks from Committee**

**II. Staff Report – Summary of previous Public Hearing  
testimony and how the concerns affect the existing  
ordinance & any proposed ordinances**

**III. Questions from the Audience for the Committee, Staff  
or Legal Counsel**

**Adjournment – 8:00 pm**

PUBLIC HEALTH, SAFETY & ZONING COMMITTEE  
PUBLIC HEARING  
WIND ORDINANCE  
MAY 23, 2012  
6:30 PM

PRESENT: Tim Moore –Chairman, Abe Forsyth – Vice-Chairman, John Fulgenzi, Linda Fulgenzi, Sam Snell, Greg Stumpf and Linda Douglas-Williams  
EXCUSED: David Mendenhall and Jason Ratts  
OTHERS: Dwayne Gab, Norm Sims, Brian McFadden, Cyndi Knowles, Craig Hall and Lou Robisch (Sec)

Chairman Moore called the meeting to order at 6:30 pm. The committee introduced themselves. Mr. Moore explained the format for the hearing. The audience was asked to sign in for the attendance record and to fill out index cards with their questions. The committee, staff and Chris Nickell would answer the questions.

Cyndi Knowles gave a short summary report of the last hearing. Some of the topics discussed at the last meeting were as follows:

- Setback distances 1800' to residential structures up to 1.5 miles from residential homes for non- participating properties
- Noise from turbine blades
- Flashing red lights on turbines / lighting regulations
- Health issues for families and wild life
- Malfunction of turbines/blades falling off/ fires in turbines
- Property values/taxes
- Property Rights for non participating property owners near project area
- Decommissioning/ Who was liable
- Weather related problems

Any questions submitted should have to do with any of the following topics;

- Setbacks
- Noise
- Lighting
- Health Concerns
- Malfunctions
- Property values/Taxes/Property Rights
- Decommissioning
- Weather

Chairman Moore asked the first question of Chris Nickell.

What would happen if the county adopted policies to prohibit the construction of wind farms - how would it affect his company, lease holders, would there be law suits?

Mr. Nickell said AWEM would close the local office and jobs would be lost. AWEM holds contracts with landowners who have consented to participating in the wind farm project and they have been receiving small option payments. Those contracts would be voided and payments would cease. They have been exploring their legal options on what they would do if the project did not move forward.

Mr. Moore also asked Mr. Nickell;

What would be the economic impact of a wind farm in Sangamon County?

Mr. Nickell passed out a handout (see attached)

The tax impact chart showed the tax revenues coming to Sangamon County per the tax rate on each of the 100 2 MW wind turbines using both the Pleasant Plains and New Berlin/Waverly school districts. The estimated total revenues would be between \$1.9 million and \$2 million, which would generate dollars to the county, schools, roads, libraries and townships. There would be the addition of new jobs associated with the project.

Laura Ryan asked a question about rights for non participating landowners living in an area zoned Agricultural. If the setback was 1200 feet, a non-participant would seem to have less setback than a participating landowner?

Norm Sims said he was not aware of any distinction in the ordinance on set backs based on a zoning district. Set backs are set to primary structures. Requirements are set by CPU in an Agricultural district. The current ordinance specifies that the set back be set up to a principal structure not a residence. In the current ordinance, setbacks for participants with a primary structure, is 1000 feet and 1200 feet from a non-participants property line. This gives a non-participant a greater setback. The set back is related to the principal structure and not a residence. Mr. Nickell clarified that a 1200 foot setback was from a non-participants property line and 1000 feet from a primary structure for participants. Mr. Sims stated that setbacks in the ordinance do not make the distinction between a residence and non residence structure. Schools, barns, churches are not residential structures. The ordinance says principal structures meaning any structure.

Laura Ryan also asked about the production tax credit for wind farms. If the production tax credit was not renewed, what happens? She stated that the wind tax credit was to expire this year.

Mr. Nickell stated that if economics don't work out, that wind farm will not be built. If there was no federal tax credit, no wind farms would be built. But if the tax credit has been granted, it cannot be taken away for 10 years. The tax credit lasts for the life of the project. The credit gives the developer a 30% tax break over the life of the project.

Can non-participating owners have a guarantee on their property valuation if located less than 2 miles from a wind farm.

Mr. Moore said Sangamon County would not consider it. Only Lee County has done this and they have not needed to use it, so they are looking to strike it from their ordinance. There may be times when agreements have been done between the homeowners and the project developers but it's extremely rare.

Can height limits be placed on a neighbor's land?

Heights are usually limited to FAA rules. The county could set a limit. There was no law to stop the county from setting a height limit. It was common in wind ordinances to have a height limit. The limit of 750 feet was higher in Logan County because they have no major airport. FAA restrictions are 500 feet. It was common to set height restrictions of 500 feet or less.

Mr. Moore asked if heights of turbines could vary per a homeowner's request?

Mr. Nickell said that the turbines were ordered to be the same. Each is designed to a specific tower height based on the location. A turbine could be placed farther away from a sensitive location to accommodate an adjoining landowner.

Laura Ryan read a summary of the Berkley Study. The conclusion of the study was that further research was needed to concentrate on those homes located closest to wind facilities. Therefore, for properties closer to wind farms, there wasn't a lot of data recorded on property values.

Mr. Sims noted that all studies are going to say more study was needed as a form of a disclaimer. The main problem is that there are not usually a lot of residents living in the areas where wind farms are built. Therefore there is not a lot of data to use to determine if property values dip when a wind farm is built near homes. He said the trend usually showed that property values do dip when it is announced that a wind farm is going to be built but that as the project comes to an end, the values start to increase. As people begin to get used to the turbines, property values have trended back up.

Greg Stumpf was still concerned about the decommissioning of a defunct wind farm. What happens if AWEM goes out of business?

Mr. Nickell stated that decommissioning was up to the developer even if they go out of business. If the wind farm is still working after 30 years, they will replace and/or upgrade the wind turbines. During the life of the wind farm, they will provide maintenance for the turbines. Mr. Nickell was willing to accept the responsibility for decommissioning and if the county decided to put this requirement in the ordinance, they were perfectly fine with it.

Mr. Stumpf asked about the set back distances and the tax credit.

Tax credit was not funds coming to AWEM from the Federal government. It's a 30% credit towards the balance tax bill AWEM has to pay. It's tax relief to the developer to encourage them to develop the project.

Mr. Sims spoke towards the set back questions. The current ordinance has a 1.5 miles setback from an incorporated area over 10,000 in population and .5 mile set back from a municipality of 10,000 people or less. State law has changed now to require 1.5 miles to any municipal jurisdiction. Our ordinance was written before this change and the county would be grandfathered in .05 mile for 10,000. It would be logical to mirror state law. When the set back of 1000 feet was written into the current ordinance, towers were shorter. Now towers are getting taller, so they have come up with a ratio formula to determine a setback. The average height of towers in 2010 was 400 feet. They said that would be the base height, so the set back was 1000 feet. If the tower is over 400 feet the

percentage would be added to the base height to increase the setback. 1400 feet is the largest setback and the majority go with 1000 feet or 1.1x the height. Mr. Nickell noted the handout provided showing the height in the AWEM project. They propose an 1800 foot setback, which would be the largest setback in the state. Other counties do not want to go with this big of a setback. The larger the setback, the less number of turbines there would be.

Linda Fulgenzi questioned the 30% tax credit. She didn't understand where the 30% would be taken from.

Mr. Nickell explained that the tax credit comes out of the AWEM Corporate income tax bill for 10 years. There is a depreciation of the turbines during the 10 years, so the total of the 30% credit would change from year to year. The rate is determined by state law and the state determines and adjusts to the CPI. The total cannot drop below 30% of the total value. Usually the first year is the highest and the percentage drops each year after due to depreciation.

There was no further business. Sam Snell motioned to adjourn and Linda Douglas-Williams seconded. The meeting adjourned at 7:31 pm.

## ESTIMATE OF TAX IMPACT FROM WIND FARM

(Pleasant Plains School district area)

The Illinois Department of Revenue assesses the value for each wind energy device at \$119,988 per megawatt (fair market value of \$359,964) Value is adjusted each year with a CPI factor and depreciation. Depreciation is over 25 years but the value may not drop below 30% of the CPI-trended value. To calculate the affect on a taxing district you would use the following formula:  
\$119,988 X Rate = Tax dollars per megawatt X number of megawatts in the particular taxing district

For example purposes, assuing 100 turbines at 2 MW each in Cartwright Township:

Assessed Value	Tax Rate	# of Turbines	MW rating for Turbine	Total Tax	Tax Per Megawatt
Pleasant Plains School Unit #8					
119,998	0.051863	100	2	\$1,244,691.25	\$6,223.46
Pleasant Plains Fire Protection District					
119,998	0.002572	100	2	\$61,726.97	\$308.63
Sangamon County					
119,998	0.00694	100	2	\$166,557.22	\$832.79
Cartwright Road and Bridge					
119,998	0.008077	100	2	\$193,844.77	\$969.22
Lincoln Land Community College					
119,998	0.004604	100	2	\$110,494.16	\$552.47
Cartwright Township					
119,998	0.003866	100	2	\$92,782.45	\$463.91
Prairie Skies Library					
119,998	0.001714	100	2	\$41,135.31	\$205.68
	0.079636			<del>\$1,911,232.15</del>	\$9,556.16

This analysis does not factor in depreciation or trending factors, as described above.  
Taxes will vary depending on turbine placement and adjustments in tax rates over time.

## ESTIMATE OF TAX IMPACT FROM WIND FARM

(New Berlin and Waverly School district areas)

The Illinois Department of Revenue assesses the value for each wind energy device at \$119,988 per megawatt (fair market value of \$359,964)

Value is adjusted each year with a CPI factor and depreciation. Depreciation is over 25 years but the value may not drop below 30% of the CPI-trended value.

To calculate the affect on a taxing district you would use the following formula:

\$119,988 X Rate = Tax dollars per megawatt X number of megawatts in the particular taxing district

For example purposes, assuing 100 turbines at 2 MW each in Maxwell Township:

Assessed Value	Tax Rate	# of Turbines	MW rating for Turbine	Total Tax	Tax Per Megawatt
New Berlin School Unit #16 119,998	0.06268	80	2	\$1,203,435.94	\$7,521.47
Waverly School Unit #6 119,998	0.061408	20	2	\$294,753.49	\$7,368.84
Sangamon County 119,998	0.006901	100	2	\$165,621.24	\$828.11
Maxwell Road and Bridge 119,998	0.006525	100	2	\$156,597.39	\$782.99
Lincoln Land Community College 119,998	0.00461	100	2	\$110,638.16	\$553.19
Maxwell Township 119,998	0.003462	100	2	\$83,086.62	\$415.43
West Sangamon Library 119,998	0.001613	100	2	\$38,711.35	\$193.56
	0.084519			\$2,052,844.19	\$10,218.43

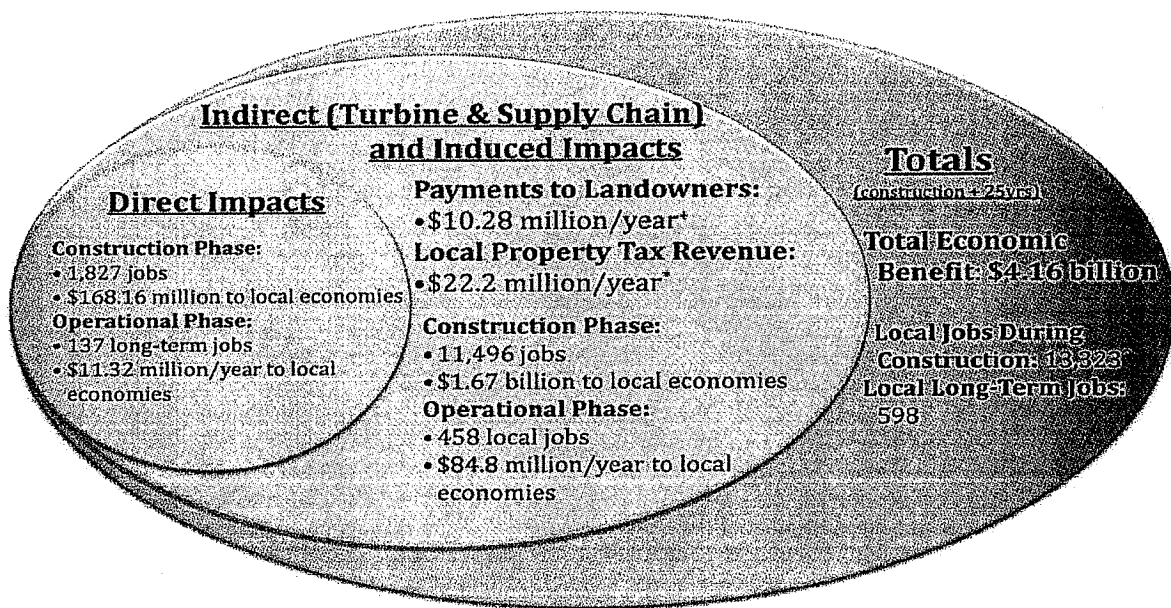
This analysis does not factor in depreciation or trending factors, as described above.

Taxes will vary depending on turbine placement and adjustments in tax rates over time.

## Economic benefits of wind farms in the local community

According to an analysis<sup>1</sup> done by The Center for Renewable Energy at Illinois State University the 17 largest wind farms in Illinois<sup>2</sup>:

- Created approx. 13,323 full-time equivalent jobs during construction periods with a total payroll of over \$762 million
- Supports approx. 598 permanent jobs in rural IL areas with a total annual payroll of over \$35 million
- Supports local economies by generating \$22 million in annual property taxes
- Generates \$10 million annually in income for IL landowners who lease their land to the wind farm developer
- Will generate a total economic benefit of \$4.1 billion over the life of the projects



3

"Wind turbines raise the property tax base of the county, creating a new revenue source..."<sup>4</sup>

Increased tax revenue can help the following public services:

- School districts
- Road improvements
- Hospitals
- Fire & Rescue

<sup>1</sup> The Center for Renewable Energy used data from wind farms and the Department of Energy's JEDI Model (Jobs and Economic Development) to come up with the impact of wind development in Illinois.

<sup>2</sup> The 17 largest wind farms are 50 megawatts or greater.

<sup>3</sup> Pg 7, *Economic Impact: Wind Energy Development in Illinois*, David Loomis, Ph.D. & Jason Carter, Center for Renewable Energy at Illinois State University

<sup>4</sup> Pg 23, *Economic Impact: Wind Energy Development in Illinois*, Loomis & Carter, Center for Renewable Energy at Illinois State University



## **Sangamon Winds' Comments on the Sangamon County Ordinance**

**Issue:** Focus of setbacks in current ordinance is on property lines instead of residences.

Currently the setback to "Primary Structures" is 1000ft while the setback to a non-participating property line is 1200ft ("perimeter setback").

**Proposed Improvement:** Increase setback to residences; adjust setback to property lines.

This would be accomplished through the following steps:

1. Replace the term "Primary Structure" in Section D(3)(b) with "Residential Structure."
2. **Increase** the setback to a "Residential Structure" in Section D(3)(b) to "1800ft or 3x the total WECS height, whichever is greater."
3. Remove the term "perimeter setback" and replace it with "setback to non-participating property lines."
4. Change the setback to non-participating property lines to 1.1x the total WECS height.

### **Justification For Changes:**

Most of the concerns raised about setbacks relate to proximity of the wind turbines to individual homes. To address these concerns, it seems logical to increase the setback to the homes. We propose an **80% increase** in the setback distance to individual homes and a height multiplier that will insure longevity of the rule change. This 1800 ft setback will be the largest in the State.

The adoption of an 1800 ft setback to residences also has the benefit of reducing the visual impact below that of the anticipated visual impact when the ordinance was adopted. The attached graphic is drawn to scale and it demonstrates that the additional distance will cause a 500ft turbine to appear smaller than a 390 ft turbine when viewed from a residence.

Adjusting the setback to non-participating property lines is consistent with standard practice in Illinois, standard operating procedures and supported by precedent. All other counties in the State of Illinois, including those with operational wind farms, use a much shorter property line setback. The Illinois Institute for Rural Affairs compiled information from the existing ordinances across Illinois. Of the 58 other ordinances in Illinois, only three had setbacks greater than 1.1x the height – one county uses a setback of 1.25x height, another uses a setback of height + 100ft, and Peoria County uses a setback of 750ft). The property line setback in Sangamon County's ordinance is therefore more than double the standard property line setback.

We therefore propose that Sangamon County adopt a setback to non-participating landowners of 1.1x the height of the WECS. This setback would align Sangamon County with the vast majority of other counties which use a standard that is widely accepted and working well in practice.

In addition, other county boards, including McLean County, have, in approving special use permits for wind projects, specifically found that similar property line setbacks have the positive effect of helping preserve farmland in areas zoned agriculture because they limit other types of development in those areas. These other counties have recognized that wind farms are not only compatible with agriculture, they complement agricultural uses.

# Windmills' Visual Impact

The visual impact is not aggravated by the construction of taller windmills as long as they are built further away from the observer.

